



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,391	01/14/2004	Soo-Young Oh	0465-1520PUS1	1888
2292 7590 10/09/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER PERRIN, JOSEPH L				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
10/09/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/756,391

Applicant(s)

OH ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01 August 2008 have been fully considered but they are not persuasive.
2. Regarding the rejection of claims 1-3, 5-7, 9, 14 and 18 over DOBER in view of ALLEN or CHO; claims 4, 8 and 10 over DOBER, ALLEN/CHO further in view of NUKAGA or OTANI; and claims 11-13, 15-17 and 19 over DOBER, ALLEN/CHO alone or further in view of HOSOKAWA and/or KLEIBER, applicant's amendment has resulted in a change to some of these rejections. In addition, applicant's arguments are solely directed to the combination of DOBER and ALLEN/CHO, thus, this response will reflect this position.
3. At the outset, on page 8 of the instant response applicant challenges the Examiner's position of rearrangement of parts based on the well established caselaw of *In re Japikse*, asserting that moving the heater of DOBER goes against the caselaw in that it "would have modified the operation of the device and therefore *In re Japikse* cannot be relied on to justify the rearrangement of the heater of Dober". The Examiner disagrees and submits that applicant has provided no evidence or showing to support this conclusion. Manifestly, the heater of DOBER would still function as a heater if rearranged. Moreover, the suggestion that one skilled in the art would not be able to provide simple rearrangement of elements simply presumes no knowledge of the art whatsoever. *In re Sovich*, 769 F.2d 738, 743 (Fed. Cir. 1985). Following this logic

suggests that the rearrangement of known elements which produce the same predictable results is not within the level and skill generally available to one of ordinary skill in the art goes against basic mechanical principals of design in the washing machine art and is contradictory to the replete teachings in the washing machine art of various configurations of known components being used in known techniques.

4. Regarding applicant's subsequent argument that one skilled in the art would not look to combine the teachings of horizontal and vertical washing machines, the Examiner strenuously disagrees and submits that applicant is completely ignoring the knowledge and skill generally available to one skilled in the washing machine art. Fundamentally, one skilled in the washing machine would be thoroughly familiar with both horizontal and vertical washing machines. Moreover, one skilled in the washing machine art would readily understand that a heater that produces steam in a horizontal washing machine would also produce steam in a vertical washing machine. Simply because there may be some differences between horizontal and vertical machines does not negate this fact, and attempts to argue the contrary appears to be an argument towards bodily incorporation based on general differences rather than the knowledge and skill of an ordinary artisan. Simply stated, heating water and injecting steam are well known in both horizontal and vertical washing machines and well understood by one having ordinary skill in the washing machine art.

5. Regarding claim 1, applicant argues the new limitation of injecting the steam "from an upper location to a lower location to the laundry". However, this broad statement with no structural configuration raises an indefinite issue (see indefinite

rejection below) and still reads on DOBER because the injection of steam during rotation of the drum results in steam traveling from an upper location to a lower location of the drum. The Examiner notes that the claim does not recite any structural configuration but simply states that steam is injected and that it travels from an upper location to a lower location. As applicant readily admits in the arguments, steam is blocked from entering the drum holes in the bottom of the drum due to stacked laundry (see paragraph bridging pages 8-9 in the instant response). Notwithstanding this, paragraph [0024] of DOBER clearly describes the use of a separate steam generator and injecting steam down into the drum. Accordingly, since DOBER teaches that the purpose of the steam injecting is to treat the laundry then the injection of steam necessarily must occur at a higher portion of the drum. Thus, recitation of DOBER still reads on such limitation as claimed.

6. Regarding claims 5 & 9, applicant further argues that "Dober discloses that the water is heated to only 80°C" and that "in Dober's method, vapor rather than steam is generated". However, a careful review of DOBER indicates that water is heated to at least 80°C for the purpose of generating steam (i.e. not simply "vapor" as purported by applicant). DOBER's clear and unambiguous disclosure of generating "steam" clearly indicates that the water would be boiled given the common definition of steam and the requirement of water to achieve steam at or above 100°C at standard pressure (i.e. go from liquid phase to gas phase), commonly known as "boiling". The Examiner notes that, while not relied upon at this time, U.S. Patent No. 4,527,343 to DANNEBERG

teaches that it is known to superheat steam in a rotating drum to achieve wrinkle-free laundry (see col. 3, lines 22-36 & col. 3, line 64 – col. 4, line 7).

7. For dependent claims 2-4, 6-8 and 10-19, as well as the non-statutory obviousness-type double patenting rejection, applicant argues reasons of same indicated for claims 1, 5 and 9, which are not persuasive for reasons of same indicated above. Regarding claim 16, applicant argues that the claim recites “supplying water to a *separate* steam generator”. However, the claim recites “supplying water to a steam generator”. Notwithstanding this, the rearrangement discussed in the rejection further addresses this issue as well as the disclosure in DOBER in paragraph [0024] of a separate steam generator.

8. Regarding new claims 20 and 21, applicant further argues the recitation of a “separate steam generator”. However, this is not persuasive as indicated above, particularly since DOBER discloses the use of a separate steam generator (see paragraph [0024] of the translation).

9. Given the state of the art and the well known concept of using steam to smooth wrinkles, it is not clear how the claimed invention defines a patentable modification over what is known in the art. Thus, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 5-10, 16, 17, 19 & 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While the original disclosure as filed discloses heating water to generate steam, the original disclosure does not describe "boiling" water to generate steam as claimed in independent claims 5, 9 & 21. Thus, the original disclosure does not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention but rather the new language appears to be added solely to overcome the prior art of record which heats water to generate steam but also does not disclose "boiling" to achieve steam. Correction is required.

In the future, it is suggested that applicant clarify where support can be found in the original disclosure upon introducing new claim limitations to avoid such rejections.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-4 & 11-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, it is unclear what is meant by injecting steam "from an upper location to a lower location". There appears to be missing a structural configuration for injecting. Is the steam injected from structure located in an upper location or is the drum simply configured to allow injected steam to travel from an upper location to a lower location? Clarification and correction are required.

14. Claims 11, 12, 13, 20 & 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In each claim, it is unclear what is meant by "separate steam generator". Manifestly, a steam generator is separate from other components. Thus, it is unclear what is meant by the steam generator being "separate". Clarification and correction as to precisely what the steam generator is "separate" from is required.

Claim Rejections - 35 USC § 103

15. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

16. Claims 1-3, 5-7, 9, 14, 20 & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOBER in view of ALLEN or CHO. Re claims 1-3, 5-7, 9, 20 & 21, DOBER discloses a method for smoothing wrinkles of the laundry in a drum-type

washing machine (col. 1, lines 47-48 & 13-14) after a conventional washing and drying comprising supplying water into a steam generator of a drum-type washing machine when a command signal for smoothing wrinkles of the laundry is inputted by a user's request after a washing process of the drum-type washing machine is completed (col. 1, lines 20-24; col. 2, lines 22-24); heating/boiling water by means of a heater installed in the steam generator to generate steam (col. 2, lines 31-35; see also heating to "at least 80°C" for the purpose of injecting steam in the translation); injecting steam generated from an upper position to a lower position (i.e. through drum holes throughout the drum and in paragraph [0024] of the translation stating injecting steam downward), for a first pre-set time to the laundry in the drum while rotating the drum of the drum-type washing machine (col. 2, lines 34-39); terminating/stopping steam-injecting when the first pre-set time elapses (col. 2, lines 52-53); rotating the drum for a second pre-set time after stopping injection of steam to the laundry in the drum-type washing machine (col. 2, lines 54-56); and stopping rotation of the drum when the second pre-set time elapses and informing a user of completion of smoothing wrinkles of the laundry (col. 2, lines 56-57). Regarding the recitation of a separate steam generator, DOBER further discloses the use of a separate steam generator in paragraph [0024]. Re claim 14, DOBER further discloses supplying water via line (5) located above the drum. While DOBER clearly discloses controller (10) for "controlling and supervising" the wash/steam cycles, the washing machine DOBER does not expressly disclose inputting the wrinkle smoothing cycle/process or displaying the wrinkle smoothing cycle/process. However, it is common knowledge that washing machines incorporate a cycle/parameter inputting

means along with a displaying means for displaying said cycle/parameter, such as a conventional touch screen controller or a knob/button controller. ALLEN teaches that it is known in the laundry processing art to provide a laundry steaming apparatus with an input controller which detects an input command to perform a steaming process and display the steaming process is being performed (see Figure 2 and relative associated text). CHO teaches that it is known to provide a washing machine with key input means for inputting "various kinds of wash-related operation command" and display means for "displaying the operation state of the washing machine, functions, etc."

It would have been obvious to one having ordinary skill in the art to include cycle/process input means and display means, as taught in the laundry apparatus of ALLEN or CHO, in the washing machine of DOBER for the purpose of yielding the predictable results of allowing a user to input a particular cycle/process and view when the cycle/process is being performed. Moreover, there would be a reasonable expectation of success in combining the references to yield the claimed invention since the references are analogous art (textile treatment art).

17. Claims 4, 8 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOBER in view of ALLEN or CHO, and further in view of NUKAGA or OTANI.

Recitation of DOBER is repeated here from above. While DOBER discloses injecting steam and terminating steam via a controller such that the washing machine door can be released, DOBER does not expressly disclose an alarm or LED signal to indicate to a user the completion of the process. Both NUKAGA (see col. 22 lines 64-68) and

OTANI (see abstract) teach the well known concept of providing either an audible alarm or LED to signal user upon completion of a process. The position is taken that it would have been within the level and skill of one having ordinary skill in the art at the time the invention was made to provide the washing machine dewrinkling process of DOBER with an alarm or LED signal to indicate completion of a treatment process. Moreover, there would be a reasonable expectation of success in using such alarm/signal to indicate completion of a process since it is common knowledge that washing appliance conventionally include alarms/signals to indication completion of a treatment process, such being readily within the level and knowledge of one having ordinary skill in the art.

18. Claims 11-13, 15-17 & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOBER in view of ALLEN or CHO, either alone or further in view of HOSOKAWA and/or DE 3408136 to KLEIBER. DOBER, ALLEN & CHO, *supra* disclose the claimed invention including injecting steam and supplying water from above the drum. However, the recited combination does not expressly disclose the location of a steam generator including a heater and such injecting means being located above the drum. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the steam generator/heater and injecting opening at any desired location, either above, below or beside the drum, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Moreover, it would have been "obvious to try" to locate such steam generating and injecting means due to the finite number of identified, predictable

locations in a washing machine with a reasonable expectation of success to one having ordinary skill in the art. Furthermore, regarding the prior art, HOSOKAWA discloses such configuration wherein a washing machine is supplied with a steam generator with heater (9 & 11) above the drum which injects steam via a steam supply line and steam injecting nozzle (12) above the drum. Similarly, KLEIBER discloses a laundry appliance and injecting steam via a steam injection nozzle connected to a supply line (see entire document, for instance, the abstract, Figures and relative associated text).

All of the component parts are known within the cited references above. The only difference is the combination of "old elements" in a single device to perform the claimed function.

Thus, it would have been obvious to one having ordinary skill in the art to provide a laundry appliance steam generator with heater and injecting means located above and/or outside the drum, as taught by HOSOKAWA and/or KLEIBER, into the washing machine as described in the combination of DOBER, ALLEN & CHO, since the operation of the steam generator and injecting means is in no way dependent on the operation of the washing machine of the cited art, and the steam generator and injecting means could be used in combination with a standard washing machine to achieve the predictable results of selectively supply steam in a steam treatment cycle in a washing machine. Moreover, there would be a reasonable expectation of success in simply combining the steam generating means of the laundry appliances fairly described in HOSOKAWA and/or KLEIBER with the washing machine disclosed in DOBER, ALLEN & CHO for the intended purpose of supplying steam in a laundry process since all of the

references are analogous art and well within the general knowledge and level of ordinary skill in the art.

Regarding claims 15, 16 & 19, each of DOBER, HOSOKAWA & KLEIBER disclose applying steam to an appliance. Because DOBER and both HOSOKAWA & KLEIBER teach methods for applying steam in a laundry appliance during a laundry treatment process, it would have been obvious to one skilled in the art to substitute one known steam supply means for the other to achieve the predictable results of treating the laundry with steam.

Double Patenting

19. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thornton*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a

terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20. Claims 1-3, 5-7 & 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 11/181,801 in view of ALLEN or CHO. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed scope fully encompasses the copending claim with the exception of the inputting of the wrinkle smoothing (steaming) process and the displaying of the steaming process. ALLEN and CHO, *supra*, teach that it is known to provide a laundry appliance with inputting means and displaying means. Thus, the incorporation of said conventional inputting means and displaying means would have yielded the same predictable results of allowing a user to input and view laundry parameters and such modification would be well within the level and skill generally available to one having ordinary skill in the art.

21. Claims 1-3, 5-7, 9, 20 & 21 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/751,978 in view of DOBER and further in view of ALLEN or CHO. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed scope fully encompasses the copending claim but for when the steam is injected (while rotating versus before rotating) and repeating the steps of injecting and stopping or the inputting of the wrinkle smoothing (steaming) process and the displaying of the steaming process. DOBER, *supra*, teaches that it is known to supply steam while rotating. Such modification considered to be an obvious variant (i.e. injecting steam while rotating versus before rotating) as it is well settled that rearranging method steps and repetition of method steps are within the

level of ordinary skill in the art. ALLEN and CHO, supra, teach that it is known to provide a laundry appliance with inputting means and displaying means. Thus, the incorporation of said conventional inputting means and displaying means would have yielded the same predictable results of allowing a user to input and view laundry parameters and such modification would be well within the level and skill generally available to one having ordinary skill in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

23. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.
25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

JLP